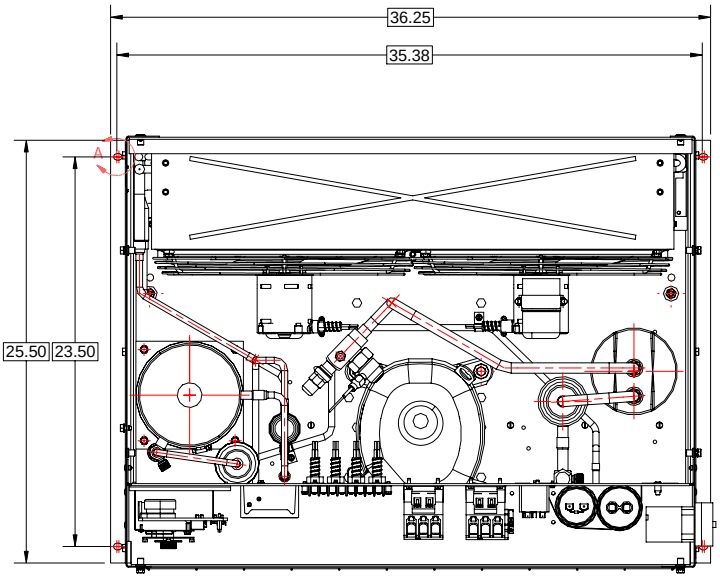
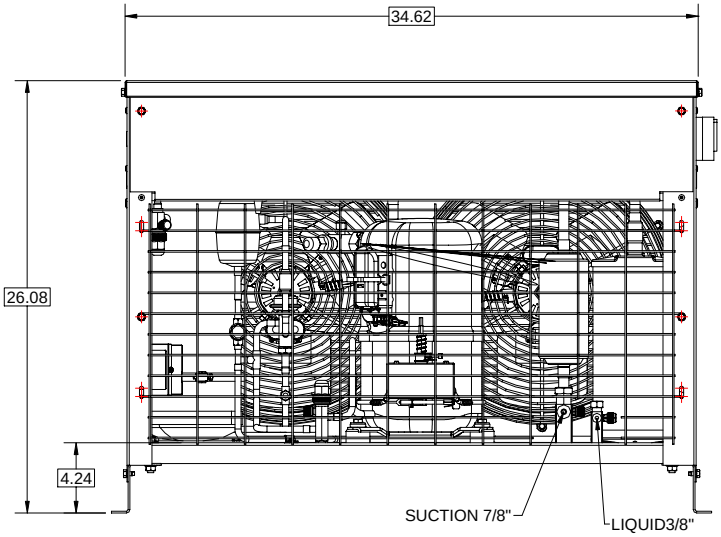
TECUMSEH OUTDOOR CONDENSING UNIT

Model	**AWA9512ZXNHN**
BOM	**32L1451-2E***
Air Cooled	**1 ¼ HP**
Application	**Commercial Temp**
Refrigerant	**R404A**
Volts-Hz-Ph	**208-230/60/1**





AWA9512ZXNHN	Overall Dimensions, inch (mm)			Line connections		Pumpdown	Air flow	Oil Ch.	Gross weight
	L	W	H	Suction	Liquid	90% @ 90°F	SCFM	Oz.	Lbs. (kg)
	26.43 (671)	36.25 (921)	26.08 (662)	7/8"	3/8"	20.09 lbs	1500	38.6	320 (145)

Factory charge 20 psig dry air, **MUST BE EVACUATED**

Evaporator		Ambient Temperatures														
		90°F			95°F			100°F			110°F			115°F		
T, °F	PSIG	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T
-10	23.9	4500	1620	99	4100	1590	103	3700	1560	108	2800	1510	117	2400	1480	121
-5	27.5	5700	1660	101	5200	1630	105	4700	1610	109	3800	1560	118	3300	1540	122
0	32.1	6900	1720	103	6400	1700	107	5800	1690	111	4700	1650	120	4200	1630	124
5	37.0	8200	1810	104	7600	1800	108	7000	1780	112	5800	1760	121	5200	1740	125
10	42.4	9600	1920	106	8900	1910	110	8200	1900	114	6900	1880	122	6200	1870	126
15	48.2	11000	2030	108	10300	2020	111	9500	2020	115	8000	2010	124	7200	2010	128
20	**54.5**	**12500**	**2140**	**109**	**11600**	**2140**	**113**	**10800**	**2140**	**117**	**9200**	**2150**	**125**	**8300**	**2150**	**129**
25	61.2	14000	2240	111	13100	2250	115	12200	2260	118	10400	2280	127	9500	2290	130
30	68.4	15600	2330	113	14600	2350	116	13600	2360	120	11600	2400	128	10700	2410	132
35	76.1	17200	2390	114	16100	2420	118	15100	2440	122	12900	2490	129	11900	2520	133
40	84.4	18900	2430	116	17700	2460	119	16600	2500	123	14300	2560	131	13100	2600	134
45	93.2	20600	2420	118	19300	2470	121	18100	2510	125	15600	2600	133	14400	2640	136

Performance @ 60 Hz, Return gas 40°F below 20°F Evaporator and 65°F above 20°F evaporator, SubCooling 5°F

*** OPTION CODE:** See reverse side for Available Options

Parts/Specifications

STANDARD

Unit BOM	**32L1451-2E**
Unit MODEL	**AWA9512ZXNHN**
Refrigeration Range	-10°F to 45°F
Design Pressure Low / High	181 / 450
Volts - HZ - Ph	208-230V ~ 60HZ
Voltage Range	187 - 253
Min. Circuit Ampacity	14.91
Max. Fuse Size	25
Compressor MODEL	AWA9490ZXN
Compressor BOM	AW616ET-111-A2
Compressor LRA	52
Compressor RLA	10.64
OverLoad	Internal
Replacement Kit - O/L	
Relay	820ARR3H23
Replacement Kit - Relay	
Run Capacitor	85PR370F17
Run Capacitor Rating	35MFD 370V
Start Capacitor	85PS330D69
Start Capacitor Rating	145-175 MFD 330V
Contactor	91014B
Unit Drawing	DGU1918-L101
Wiring Diagram	WD21-2XT2
Wiring Diagram (A or F opt.)	WD21-2AT2

Fan Motor	810F050C20
Replacement Fan Motor	50W230
Fan Motor Qty	2
Fan Motor RLA	0.7
Fan Blade	51568-1
Fan Guard	70831
Shroud	70648-2
High Pressure Switch	84095-2L
Low Pressure Control	84026-2
Dual Pressure Conrol	
Head Master Valve	70083
Check Valve	56626
Process Valve	
Discharge Valve (Base)	56618
Liquid Valve (Base)	56500-K06
Liquid Valve (Receiver)	attached
Suction Valve (Base)	56500-K14
Suction Valve (Rotolock)	31531-1
Condenser	50858-1
Receiver	51099-2L
Accumulator	TK00042000
Liquid Filter	70139
Sight Glass	70084-S
Suction Filter	70822-5S
CrankCase Heater	91022-1

AVAILABLE OPTIONS

32Lxxxx-2ER(F)ATnD

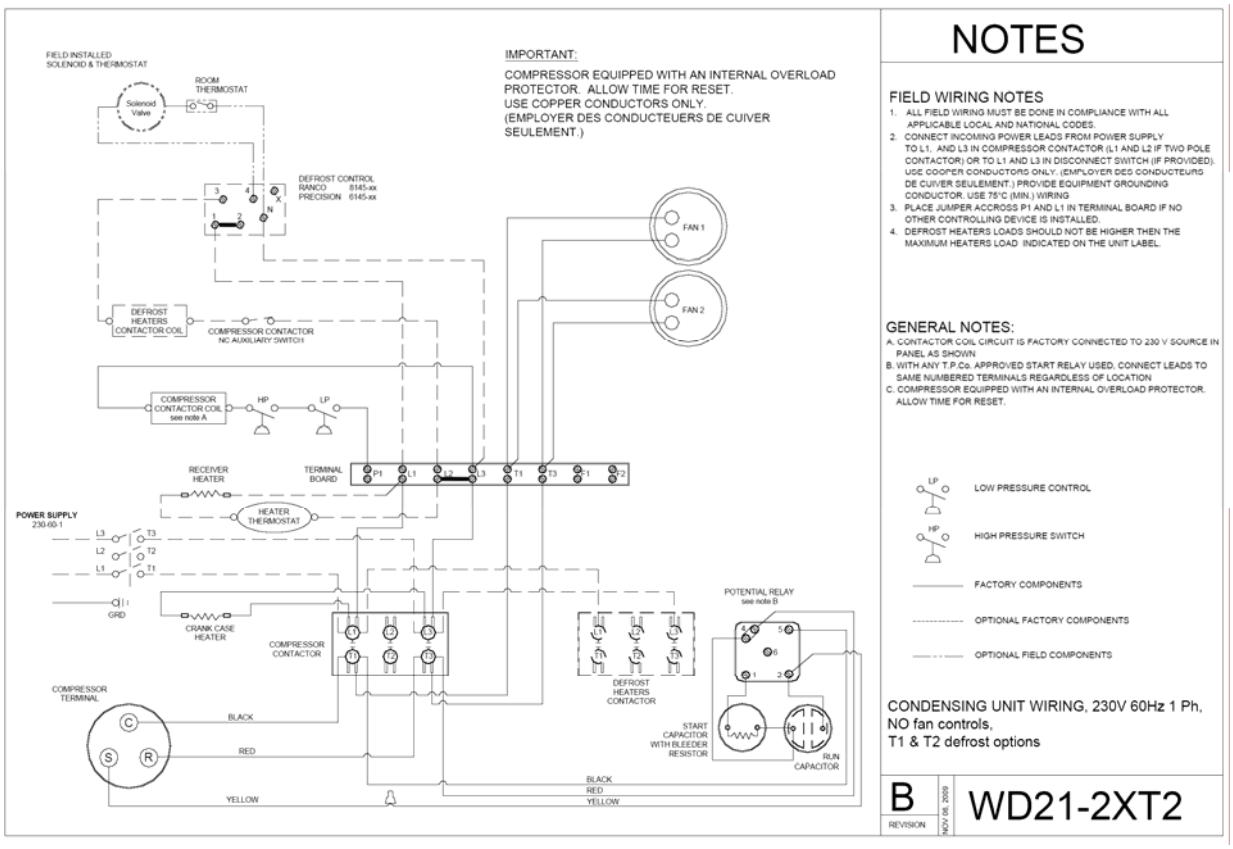
R Heated/Insulated Receiver
F Fixed Fan Control
A Adjustable Fan Control
T1 Air Defrost Timer
T2 Electrical Defrost Timer & Defrost Heater Contactor
D Disconnect Switch (nonfused)

AVAILABLE ACCESSORIES

Solenoid Valve (supplied loose)	KSVC-264
Hail Louver Assy	LLPG-201

REPLACEMENT PARTS

Receiver Heater (R option)	92124-2
Receiver Thermostat (R option)	84102-2
Fixed Fan Control (F option)	84132-1
Adjustable Fan Control (A option)	
Defrost Timer (T1 or T2 option)	84110
Defrost Heater Contactor and Auxiliary Switch (T2 opt.)	91014B and 91014-AUX
Disconnect (D option)	


FIELD INSTALLED SOLENOID & THERMOSTAT
ROOM THERMOSTAT
Solenoid Valve
DEFROST CONTROL RANCO 8145-xx PRECISION 6145-xx
DEFROST HEATERS CONTACTOR COIL
COMPRESSOR CONTACTOR NC AUXILIARY SWITCH
COMPRESSOR CONTACTOR COIL see note A
HP
LP
RECEIVER HEATER
TERMINAL BOARD
HEATER THERMOSTAT
POWER SUPPLY 230-60-1
GRD
CRANK CASE HEATER
COMPRESSOR CONTACTOR
POTENTIAL RELAY see note B
DEFROST HEATERS CONTACTOR
COMPRESSOR TERMINAL
START CAPACITOR WITH BLEEDER RESISTOR
RUN CAPACITOR
FAN 1
FAN 2
BLACK
RED
YELLOW
IMPORTANT:
COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.
USE COPPER CONDUCTORS ONLY.
(EMPLOYER DES CONDUCTEUERS DE CUIVER SEULEMENT.)
NOTES
FIELD WIRING NOTES
1. ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
2. CONNECT INCOMING POWER LEADS FROM POWER SUPPLY TO L1, AND L3 IN COMPRESSOR CONTACTOR (L1 AND L2 IF TWO POLE CONTACTOR) OR TO L1 AND L3 IN DISCONNECT SWITCH (IF PROVIDED). USE COOPER CONDUCTORS ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVER SEULEMENT.) PROVIDE EQUIPMENT GROUNDING CONDUCTOR. USE 75°C (MIN.) WIRING
3. PLACE JUMPER ACCROSS P1 AND L1 IN TERMINAL BOARD IF NO OTHER CONTROLLING DEVICE IS INSTALLED.
4. DEFROST HEATERS LOADS SHOULD NOT BE HIGHER THEN THE MAXIMUM HEATERS LOAD INDICATED ON THE UNIT LABEL.
GENERAL NOTES:
A. CONTACTOR COIL CIRCUIT IS FACTORY CONNECTED TO 230 V SOURCE IN PANEL AS SHOWN
B. WITH ANY T.P.Co. APPROVED START RELAY USED, CONNECT LEADS TO SAME NUMBERED TERMINALS REGARDLESS OF LOCATION
C. COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.
LOW PRESSURE CONTROL
HIGH PRESSURE SWITCH
FACTORY COMPONENTS
OPTIONAL FACTORY COMPONENTS
OPTIONAL FIELD COMPONENTS
CONDENSING UNIT WIRING, 230V 60Hz 1 Ph,
NO fan controls,
T1 & T2 defrost options
B
REVISION
NOV 06, 2009
WD21-2XT2